

March 10, 2020

**Public Notice for Water Quality Certification and/or Waste  
Discharge Requirements (Dredge/Fill Projects)  
Mark West Creek Regional Park and Open Space Preserve  
Culvert Replacement Project  
ECM PIN CW-861238; WDID 1B190160WNSO  
Sonoma County**

On September 17, 2019, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from Pacific Watershed Associates on behalf of Mark Cleveland of Sonoma County Regional Parks, requesting Federal Clean Water Act, section 401, Water Quality Certification (certification) for activities related to the proposed Mark West Creek Regional Park and Open Space Preserve Culvert Replacement Project (Project).

**Project Location**

The Project is located within the Mark West Creek Regional Park and Open Space Preserve at 2590 Cresta Road in Santa Rosa approximately 7 miles east of U.S. Highway 101.

**Project Description**

The Project would upgrade access roads damaged in the 2017 Tubbs Fire, improve improperly designed stream crossings, reduce erosion and sediment delivery into Mark West Springs Creek, and address concentrated hydrologically connected road runoff by improving road shaping and/or installing additional road drainage structures. Approximately 1.75 miles of road will be upgraded, including 1.00 miles of Cresta Road and 0.75 miles of McCullough Road. Project treatments would reduce erosion and future road-related sediment delivery to Mark West Creek. Overall, 27 road-related sediment source sites composed of 16 stream crossings, nine ditch relief culverts, one road surface discharge point, and one instream head cut would be treated. Many Project treatment sites are located outside of, and would not discharge into, "Waters of the State". This certification request is limited to the 16 stream crossings and lone head cut located in, or adjacent to, those waters. Site-specific details for the sites requiring permits are outlined below:

Cresta Road:

Stream Crossing 6

An existing 18-inch diameter concrete culvert would be removed and replaced with a 36-inch diameter, 40-foot long, culvert. The road surface would be raised approximately 2-inches to accommodate the larger-diameter culvert. A critical dip would be installed across the road to capture diverted flow in the event the inlet was blocked. A single post trash rack would be installed upstream of the culvert inlet.

#### Stream Crossing 9

An existing undersized 24-inch diameter culvert would be removed and replaced with a 48-inch diameter, 40-foot long, culvert. The road surface would be raised 2 inches to accommodate the larger-diameter culvert. A critical dip would be installed across the road to capture diverted flow in the event the inlet was blocked. A single post trash rack would be installed upstream of the culvert inlet.

#### Stream Crossing 14

Remove two side-by side 18-inch diameter culverts (one plastic, one metal) and replace with a single 48-inch diameter, 40-foot long, corrugated metal pipe (CMP). The road surface would be raised 2 feet to accommodate the larger culvert. The outboard fill slope would be re-graded and armored. A critical dip would be installed across the road to capture diverted flow in the event the inlet was blocked. A single post trash rack would be installed upstream of the culvert inlet.

#### Stream Crossing 18

Currently, there is no functioning drainage structure at Stream Crossing 18. Flow is diverted down the road and into a ditch relief culvert. The Project would install a 30-inch diameter, 40-feet long, CMP in line with the natural channel. The outboard fill slope would be re-graded and armored. A critical dip would be installed across the road to capture overtopped flow in the event the inlet was blocked. A single post trash rack would be installed upstream of the culvert inlet. A critical dip would be installed across the road to capture diverted flow in the event the inlet was blocked.

#### Stream Crossing 19

The Project would remove the existing culvert and replace it with a 30-inch diameter, 30-feet long, CMP. Portions of the road will be re-shaped and existing large boulders would be incorporated into the re-shaping. Additional small rock would be placed between the larger boulders to improve stability. The outboard and inboard fill slopes would be re-graded and armored. A critical dip would be installed across the road to capture overtopped flow in the event the inlet was blocked. A single post trash rack would be installed upstream of the culvert inlet. A critical dip would be installed across the road to capture diverted flow in the event the inlet was blocked.

#### Headcut Site

The headcut repair is located on a small tributary downstream of Site 9 described above. At ground-level, portions of the headcut are approximately 70 feet wide. In some locations headcut walls are almost vertical and approximately 10 feet high. Cracks along the perimeter indicate the headcut is increasing in size as the walls continue to erode and collapse, depositing sediment into adjacent watercourses. To reduce this, the Project would regrade headcut side slopes to a 1:1 slope and install a grade control structure in the gully. The grade control structure would be "u-shaped", approximately 25-feet long and 2-feet deep. A keyway approximately 30-feet wide tapering to approximately 6-feet wide would be filled with approximately 30 cubic yards of rock, ranging from 0.5 feet to 2 feet in diameter.

McCullough Road:

Stream Crossing 1

The remnants of the melted plastic culvert would be removed and replaced with a 24-inch diameter, 25-foot long CMP. The new culvert outlet would extend approximately 3-feet beyond the existing outlet. Rock armor would be placed at the culvert outlet to dissipate energy. Both fill slopes would be armored with rock. A critical dip would be installed across the road to capture overtopped flow in the event the inlet was blocked. A single post trash rack would be installed upstream of the culvert inlet. The road surface would be surfaced with approximately 20 cubic yards of 1.5-inch minus road rock.

Stream Crossing 2

The remnants of the melted 18-inch diameter plastic culvert would be removed and replaced with a 24-inch diameter, 20-foot long CMP. Both fill slopes would be armored with rock. A single post trash rack would be installed upstream of the culvert inlet. The road surface would be surfaced with approximately 20 cubic yards of 1.5-inch minus road rock.

Stream Crossing 4

The remnants of the melted 18-inch diameter melted plastic culvert would be removed and replaced with a 24-inch diameter, 30-foot long CMP. The outboard fill slope would be armored with rock. A single post trash rack would be installed upstream of the culvert inlet. The road surface would be surfaced with approximately 20 cubic yards of 1.5-inch minus road rock.

Stream Crossing 5

The remnants of the melted 24-inch diameter plastic culvert would be removed and replaced with a 24-inch diameter, 25-foot long CMP. The outboard fill slope would be armored with existing rock where possible. A single post trash rack would be installed upstream of the culvert inlet. The road surface would be surfaced with approximately 20 cubic yards of 1.5-inch minus road rock.

Stream Crossing 7

The remnants of the melted 18-inch diameter plastic culvert would be removed and replaced with a 24-inch diameter, 20-foot long CMP. Both the inboard and outboard fill slopes would be repaired and/or armored with existing rock where possible. A trash rack would be installed upstream of the culvert inlet. The road surface would be surfaced with approximately 20 cubic yards of 1.5-inch minus road rock.

Stream Crossing 8

The remnants of the melted 24-inch diameter plastic culvert would be removed and replaced with a 24-inch diameter, 40-foot long CMP. Both the inboard and outboard fill slopes would be re-built and armored with approximately 13 cubic yards of rock. A critical dip would be installed across the road to capture overtopped flow in the event

the inlet was blocked. A trash rack would be installed upstream of the culvert inlet. The road surface would be surfaced with approximately 20 cubic yards of 1.5-inch minus road rock. The steep hillslope above the culvert inlet is at risk of failure. Failure would deposit earthen material into the channel which would likely block the inlet. To reduce this potential, a 12-foot wide and 13-foot tall grade control structure would be constructed upstream of the inlet using approximately 12 cubic yards of assorted-sized rock.

#### Stream Crossing 9

Assorted legacy land use activities at the site continue to divert flow from two watercourses around the Palm homestead and into a single, constructed drainage ditch adjacent to the dirt access road. Ditch flow drains under the road through a melted 24-inch diameter plastic culvert. The road is at risk of failure at the crossing. The existing crossing would be removed and a replaced with a new 24-inch diameter, 30-foot long ditch relief culvert. Additionally, a new 42-inch diameter, 50-foot long CMP would be installed at a pre-marked location (approximately 200 feet from the existing crossing) to drain flow from both watercourses under the road. Because the watercourse upstream of the new culvert inlet is poorly defined, approximately 300 feet of the channel bottom would be re-defined to a width of 4 feet to ensure flow remains in the watercourse. A trash rack would be installed upstream of the culvert inlet. Portions of the new crossing's outboard fill slope would be armored with rock. A critical dip would be installed at the crossing hinge line to intercept diverted flow were the culvert inlet to block and flow overtop the crossing. A rolling dip would also be installed across the road downgrade of the new crossing to intercept any road surface flow. The road would be outslowed and re-rocked with approximately 40 cubic yards of 1.5-inch minus drain rock.

#### Stream Crossing 10

The Project would decommission approximately 80 feet of existing diverted stream alignment associated with Stream Crossing 9 by removing the existing berm, filling the channel, and blending it into the adjacent hillslope. A Class III stream that is currently diverted for 80' along the cutbank to Site 9. Additionally, a new channel approximately 225 feet long and 3 feet wide would be created to drain flow into a vegetated area. Disturbed road surfaces would be rocked with approximately 35 cubic yards of 1.5-inch minus rock.

#### Stream Crossing 11

Currently, an appropriately sized 24-inch diameter culvert drains watercourse flow under McCullough Road. However, the inlet is partially blocked by large boulders. These boulders would be removed, and the slopes regraded to reduce culvert blockage and bank erosion potential. A critical dip would be installed across the road to capture overtopped flow in the event the inlet was blocked. The road surface would be re-rocked with approximately 20 cubic yards of 1.5-inch minus road rock.

#### Stream Crossing 12

An existing, partially plugged, 48-inch diameter culvert would be removed and replaced with a 48-inch diameter, 30-foot long CMP. Lower fillslopes would be armored with rock

to reduce erosion potential. A critical dip would be installed across the road to capture overtopped flow in the event the inlet was blocked. The road surface would be re-rocked with approximately 20 cubic yards of 1.5-inch minus road rock.

### Stream Crossing 13

Currently, two watercourses drain through one improperly installed and undersized 18-inch diameter culvert. The eastern-most watercourse would continue to drain through this culvert. However, a new 30-inch diameter, 40-foot long, culvert aligned with the relic channel below the road would be installed to drain the western-most watercourse. Approximately 15 feet of the channel upslope of the culvert would be excavated to a width of approximately 3 feet wide to ensure flow remains in the channel. Rock would be placed on portions of the outboard fillslopes to reduce erosion potential. A critical dip would be installed across the road to capture overtopped flow in the event the inlet was blocked. The road surface would be re-rocked with approximately 20 cubic yards of 1.5-inch minus road rock.

Disturbed areas will be seeded with native seed and container plants will be planted after the first significant rainfall in late fall or early winter when soil moisture is adequate for planting as part of Caltrans' proposed Revegetation Plan for the Project.

### **Construction Timing**

Project construction is anticipated to occur between August and October within three construction seasons. Any work within jurisdictional waters during the wet season will require approval from the Regional Water Board.

### **Impacts**

The Project will result in 48 linear feet of permanent impacts to stream channel and 91 square feet of riparian area. The Project will result in approximately 625 linear feet of temporary impacts to stream channel and approximately 2,450 square feet of riparian area. Impacts are primarily a result of culvert replacement activities.

### **Mitigation for Project Impacts**

The Project is considered self-mitigating because undersized, melted, and improperly functioning culverts would be replaced with culverts sized to accommodate 100-year flood flows. Culvert replacement, coupled with road upgrades including rocking and critical dip construction, would reduce erosion and the threat of fine sediment delivery into adjacent watercourses. Additionally, the headcut repair will reduce ongoing gully erosion and sediment delivery.

### **Post-Construction Storm Water Treatment**

The Project will not replace or increase impervious surface larger than one acre. Post-construction storm water treatment is not required for this Project.

### **Other Agency Permits**

The Applicant has applied to the United States Army Corps of Engineers for Nationwide Permit No. 3 (Non-Reporting) pursuant to section 404 of the Clean Water Act.

Additionally, the Applicant has applied for a 1600 Lakebed Streambed Alteration Agreement from the California Department of Fish and Wildlife.

### **CEQA**

The North Coast Regional Water Quality Control Board (NCRWQCB) has determined that the Project qualifies for a Categorical Exemption 15304 Minor Alterations to Land (f). The NCRWQCB will file a Notice of Exemption with the State Clearinghouse concurrent with issuance of the 401 Water Quality Certification, pursuant to CEQA guidelines.

### **Public Comments**

Regional Water Board staff are proposing to regulate this Project pursuant to Section 401 of the Clean Water Act (33 USC 1341) and/or Porter-Cologne Water Quality Control Act authority. The information contained in this public notice is only a summary of the Applicant's proposed activities. The application for Water Quality Certification in the Regional Water Board's file contains additional details about the proposed Project including maps and photos. The application and Regional Water Board file are available for public review at the Regional Water Board office, 5550 Skylane Blvd, Suite A, Santa Rosa, California. Appointments are recommended for document review and can be made by calling (707) 576-2220.

If you have any questions, please contact Ryan Bey at [Ryan.Bey@waterboards.ca.gov](mailto:Ryan.Bey@waterboards.ca.gov) or (707) 576-2679.

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